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BY THE U.S. GENERAL ACCOUNTING OFFICE  
**Report To The  
Secretary Of Defense**

**If Excess Chartered Sealift Capacity  
Is Needed For Contingencies, It Should Be  
Put To Maximum Peacetime Use**

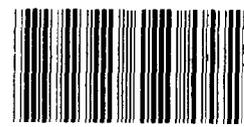
The Navy's Military Sealift Command charters ships to carry military cargo. These ships usually sail more than half empty. At the same time, the Navy is buying space on regularly scheduled commercial ships. The Navy justifies the chartering of excess capacity on the basis of contingency needs.

DOD policy encourages the use of commercial ships, but at the same time, it supports the use of chartered ships.

DOD needs to reexamine the need for this excess chartered capacity in view of other alternatives. If the excess chartered capacity is needed, however, DOD should clarify its conflicting policy to make maximum use of the chartered ships in peacetime.



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UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

LOGISTICS AND COMMUNICATIONS  
DIVISION

B-200191

The Honorable Harold Brown  
The Secretary of Defense

Dear Mr. Secretary:

This report discusses the Navy's chartering of cargo ships in excess of its peacetime needs. On July 17, 1980, we sent a draft of our report to you for comment. We did not receive a reply or a request for extension within 30 days. Therefore, in accordance with provisions of Public Law 96-226, this report does not include the views of Department of Defense officials.

Chapter 4 contains our recommendation to you on the chartering of cargo ships. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Director, Office of Management and Budget; the Chairmen, Senate Committee on Governmental Affairs, House Committee on Government Operations, and Senate and House Committees on Appropriations and on Armed Services; and the Secretaries of the Army, Navy, and Air Force.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "R. W. Gutmann".

R. W. Gutmann  
Director

AG C 00205



D I G E S T

The Department of Defense (DOD) moves military cargo on military ships and regularly scheduled commercial ships, as well as chartered commercial ships. Sometimes, these chartered ships serve out-of-the-way ports and carry cargo which commercial ships cannot carry. However, most of the voyages are to ports usually served by commercial carriers.

DOD regularly charters excess sealift capacity. For example, GAO found that during a 1-year period, the chartered ships were significantly underused. On the average, the ships were 38-percent loaded on outbound voyages and 25-percent loaded on inbound voyages.

GAO also found that cargo which could have been shipped on these voyages was instead shipped commercially. To the extent that fully paid space was available on the chartered ships, the Government incurred additional costs by shipping military cargo commercially.

Military traffic managers usually decide whether to use commercial or chartered ships. They base their decisions on DOD policy. That policy is somewhat unclear because it encourages both the maximum possible use of commercial carriers and the support of the chartered fleet.

DOD paid about \$114 million to charter dry cargo ships during fiscal year 1979. GAO did not attempt to determine, overall, how much could have been saved by (1) diverting cargo which went on commercial ships to the chartered ships or (2) making greater use of the commercial ships, thereby chartering fewer ships. The cost in personnel to match

cargo which actually moved commercially to specific voyages of the chartered ships and vice versa would be prohibitive.

GAO did analyze two voyages where chartered ships were significantly underused. GAO found that DOD's transportation costs could have been reduced by about \$438,000 by diverting to the two chartered ships some of the cargo which moved commercially.

DOD officials maintain that their policy is clear and that utilization is not the only factor to be considered when determining the number of ships required in the fleet. They maintain that the ships in the chartered fleet provide a readiness capability in the event of an emergency requiring a military sealift capacity. In essence, they believe the underuse of chartered ships is a price which should be paid for that readiness capability.

Further, DOD officials believe the Department should continue its policy of shipping the bulk of its goods on commercial ships since those ships offer the advantage of containerized shipment, a capability available only in a limited way on the chartered ships. They also point out that containerized shipments are more direct, cheaper, and less subject to damage and theft than uncontainerized shipments.

GAO previously reported that the National Defense Reserve Fleet could satisfy the military's need for a quick sealift capability. GAO pointed out that a fleet of quick-response ships had recently been upgraded. Early tests of this Ready Reserve Fleet showed that it could satisfy the requirement set by the Department of the Navy for quick response. Other resources were also available for this purpose.

Considering the availability of those resources, GAO recommends that the Secretary of Defense reexamine the need for chartering excess ships for contingencies. However, if the excess capacity is needed, the Secretary of Defense should clarify DOD's policy on

the use of chartered versus commercial ships to make maximum use of the excess capacity in peacetime.

On July 17, 1980, GAO forwarded a draft of this report to the Secretary of Defense for comment. GAO did not receive a reply or a request for extension within 30 days. Therefore, in accordance with the provisions of Public Law 96-226, this report does not include the views of DOD officials.



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## ABBREVIATIONS

DOD	Department of Defense
GAO	General Accounting Office
MSC	Military Sealift Command



## CHAPTER 1

### INTRODUCTION

The Navy's Military Sealift Command (MSC) is responsible for the worldwide movement of military ocean cargo. Since the early 1950s, the Navy has been chartering commercial ships to augment its peacetime sealift capability. The cost for chartering and operating these ships during fiscal year 1979 was approximately \$145 million. Of this, \$114 million was for dry cargo ships.

The size of the chartered fleet is determined by what is required to (1) meet contingency situations where implementation of the Sealift Readiness Program and activation of the National Defense Reserve Fleet is improbable and (2) move cargo which cannot be readily moved by U.S.-flag carriers in regularly scheduled operations.

### CONTINGENCY REQUIREMENT

The Department of the Navy has directed MSC to make 10 of its Government owned or chartered ships available to receive cargo within 10 days to meet contingency requirements. As a result, MSC routinely charters more ships than it needs to transport peacetime cargo. When there is not enough peacetime cargo to warrant use of all of its fleet, MSC places some of its ships in a standby status.

In February 1979 we examined the readiness question and reported MSC could meet this requirement in less expensive ways. For example, MSC could use the Ready Reserve Fleet and the Sealift Readiness Program.

Our report pointed out that during 1976, the Department of Defense (DOD) and the Maritime Administration started a joint program to upgrade the responsiveness of part of the Maritime Administration's National Defense Reserve Fleet. The program's specific purpose was to activate ships within 10 days. These upgraded ships constituted a fleet called the Ready Reserve Fleet. Before our February 1979 report, two ships were successfully activated in 10 days on a test basis. Seven ships were in the fleet then.

Our report also found that DOD's Sealift Readiness Program was another available resource to provide sealift capability in the event of an emergency.

In responding to our report, the Secretary of the Navy stated that both the chartered ship and Ready

Reserve Fleet programs are considered cost effective and are in their early development stages. He further stated that as scheduled development tests are completed and sealift requirements are refined over a broader range of scenarios, cost effective program adjustments will be made.

As of April 1980, according to Maritime Administration officials, the number of ships in the Ready Reserve Fleet had risen to 20. These ships are comparable to the ships MSC charters. In fact, some are more modern and have greater cargo-carrying capacity. The Maritime Administration anticipates either upgrading or acquiring at least six more ships during 1980. Additional ships will be acquired as funds become available.

Also, since our report, the number of dry cargo ships in the Sealift Readiness Program has almost doubled to 199 ships. For the first time, tankers are also part of the program. These increases are due to provisions in the last two appropriation acts. Now, all subsidized ships must also be available for the program. Originally, each U.S.-flag ship operator carrying peacetime DOD cargo agreed to commit up to half its ships for MSC use in an emergency. The ships in the program can be called in and chartered by MSC with DOD approval for periods up to 1 year. As a result of these changes, the program covers potentially most of the U.S.-flag carrier fleet.

#### PEACETIME USAGE

The number of chartered ships used during peacetime varies from time to time. As of September 1979, 25 ships were chartered from U.S.-flag ship operators. Six of the ships were tugs, barges, and coal carriers, and one--the Admiral William M. Callaghan--was a specially designed vessel known as a roll-on/roll-off ship. The remaining 18 were break-bulk (loose cargo) ships capable of handling dry cargo in conventional holds. These ships are equipped with cargo handling gear that enables them to load and unload their own cargo.

The backbone of the break-bulk charter fleet is the challenger-class ships which were built in the 1960s. They have cargo-carrying capacities of about 17,200 measurement tons and are the newest ships under charter. Others known as the "green ships" have capacities of 19,735 measurement tons and were built in the mid-1940s. Two "heavy lift" ships with capacities of 16,250 measurement tons make up the balance of the break-bulk fleet. These ships were also built in the mid-1940s.

The chartered fleet provides both scheduled and unscheduled service. The challenger-class ships usually provide the scheduled service to Europe, the Mediterranean, the Azores, Hawaii, and the Far East. The green and heavy-lift ships are used as needed.

Sometimes, the chartered ships carry cargo which commercial ships cannot carry, such as ammunition and outsized military shipments, or it serves remote locations not served commercially. Mainly, however, the chartered ships sail to ports usually served by commercial carriers, and they carry similar cargo. This places the chartered fleet in direct competition with commercial carriers for the available military cargo.

During fiscal year 1978, the Navy arranged transportation for more than 7.7 million measurement tons of cargo. This cargo consisted of items, such as military vehicles, clothing, food, spare parts, privately owned vehicles, ammunition and coal. Some of these commodities were carried on Navy owned and operated ships and some were carried on ships chartered from private owners. However, the bulk of the cargo was carried on commercial ships, as shown below.

<u>Ship type</u>	<u>Measurement tons of military cargo</u>	<u>Percent</u>
Navy ships	348,300	4.5
Chartered ships:		
Dry cargo	1,484,700	19.2
Other	635,400	8.2
Commercial ships	<u>5,264,600</u>	<u>68.1</u>
Total	<u><u>7,733,000</u></u>	<u><u>100.0</u></u>

## CHAPTER 2

### CHARTERED CARGO SHIPS

#### COULD BE BETTER UTILIZED

The cargo ships chartered by MSC usually sail more than half empty. At the same time, available cargo which could be carried by these vessels generally is loaded on commercial vessels. As a result, the Government incurs unnecessary ocean freight costs because it has already paid for the chartered fleet, and use of the otherwise unused space on these charter ships would be without additional cost. Whereas, when commercial service is used, the Government must pay for both the charter and commercial service.

#### CHARTERED CARGO SHIPS RARELY EQUAL OR EXCEED LOADS CARRIED BY COMMERCIAL SHIPS

The chartered cargo ships in the fleet rarely sail with loads that equal or exceed the industry-recognized benchmark--65 percent of capacity.

Our study of the use of chartered ships for a 1-year period showed that the average utilization was 38 percent on outbound voyages and 25 percent on inbound voyages. Utilization exceeded the 65-percent benchmark on only one of the 194 sailings we examined.

Appendix I shows the ship-by-ship utilization percentages for the outbound and inbound voyages made during our study period. <sup>1/</sup> The following schedule stratifies these utilization percentages on a fleet basis.

<u>Utilization range</u>	<u>No. of voyages</u>	
	<u>Outbound</u>	<u>Inbound</u>
(percent)		
Over 65	-	1
51 to 65	16	5
36 to 50	47	16
21 to 35	28	38
6 to 20	3	22
Under 6	<u>3</u>	<u>15</u>
Total	<u>97</u>	<u>97</u>

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<sup>1/</sup>During our study period (Apr. 1978 through Mar. 1979), MSC had 20 break-bulk ships under charter.

Since we only considered ship utilization during actual voyages, our estimates of utilization are overly conservative. We ignored the time these ships were not being used at all, either because of the lack of cargo or the need to fulfill the military requirement for ships in standby status for emergencies. A comparison of days available and actual utilization would yield even lower utilization percentages than we calculated.

CARGO SHIPPED COMMERCIALY COULD  
BE CARRIED BY THE CHARTERED FLEET

Our study showed, and MSC officials agreed, that cargo which was shipped commercially could have been carried by the chartered fleet.

Military personnel told us that, generally, traffic managers are routing a constant flow of cargo, and therefore, the use of chartered ships could be increased. We tried to verify that statement by studying two of the lowest utilized voyages made during our review. We wanted to determine whether cargo was available to better utilize chartered ships and whether the ships could deliver that cargo to the proper port on time. The voyages with low utilization were as follows:

<u>Ship</u>	<u>Leave</u>		<u>Arrive</u>		<u>Percent of utilization</u>
American Courier	Charleston, S.C.	6/14/78	Bremerhaven, Germany	6/27/78	25
	Norfolk, Va.	6/16/78	Rota, Spain	7/4/78	
	Bayonne, N.J.	6/18/78	Praiavitar, Azores	7/8/78	
Transcolorado	Bayonne, N.J.	11/15/78	Port Roosevelt,		12
	Charleston, S.C.	11/18/78	Puerto Rico	11/21/78	
			Port Cristobal,		
			Canal Zone	11/25/78	
			Balboa, Canal Zone	11/26/78	
		Oakland, Calif.	12/7/78		

We visited the Military Ocean Terminal in Bayonne, New Jersey, and examined export cargo offerings where the cargo was available for shipment approximate to the schedule of these voyages. We then eliminated cargo where the required delivery date could not be met by the schedule of these ships.

We found sufficient cargo to more than fill the American Courier and enough cargo to more than double the load carried by the Transcolorado, although the ship still would have been underused. The following schedule shows the result of our tests.

	<u>American Courier</u>	<u>Transcolorado</u>
	(measurement tons)	
Capacity	<u>17,187</u>	<u>16,250</u>
Capacity at 65-percent benchmark	11,172	10,563
Cargo actually loaded	<u>4,228</u>	<u>1,977</u>
Available capacity to benchmark	<u>6,944</u>	<u>8,586</u>
Additional cargo identified by GAO	<u>a/6,944</u>	2,896
Estimated cost of commercial shipment (note b)	\$270,400	\$167,300

a/We actually identified 16,836 measurement tons of cargo, or more than twice the ship's available capacity.

b/We estimated these costs by using the actual commercial ocean billing rates in effect at the time of the chartered ships' voyages.

As shown in the above schedule, the Government could have saved about \$438,000 in ocean freight charges by shipping these goods on the chartered ships instead of on commercial ships. The chartered ships had the capacity available and could have delivered the cargo to the right port on time. We recognize that some of these savings would be offset by the added costs associated with shipping cargo on chartered ships. For example, the cost of loading and unloading break-bulk cargo on the chartered ships would be greater than the cost to handle containerized cargo tendered to a commercial ship.

## CHAPTER 3

### MILITARY POLICY SHOULD BE REEXAMINED

DOD policy on the shipment of military cargo is somewhat unclear. The policy encourages the maximum possible use of commercial ships, but at the same time, it supports the use of chartered ships. Traffic managers interpret this policy to mean that most military cargo should be shipped on commercial vessels.

#### THE OVERALL MILITARY POLICY

The basic military policy governing the shipment of cargo overseas is set forth in DOD Directive 4500.9. This directive requires that a method of shipment be selected which satisfactorily meets military needs at the lowest cost. Consideration is to be given to economies in reducing warehousing and shipment preparation, cargo loss and damage, personnel travel time, and transportation costs. Consideration is also to be given to the best use of commercial ships and Government-controlled resources, such as military ocean terminals and the chartered ships. In essence, the policy encourages the use of commercial ships, while at the same time, it encourages the use of chartered ships.

#### THE CONTAINER POLICY GOVERNS HOW MILITARY CARGO IS SHIPPED

DOD's container policy has been reinforced by a number of implementing instructions, regulations, and procedures. One of these instructions has, over time, become the operative policy that traffic managers use daily. The instruction, known as the "DOD Container Policy," was issued in August 1976 as DOD Instruction 4500.37. Essentially, the container policy states that if the cargo being shipped can fit into a container, it should be containerized. The policy further states that use of commercial container service is preferred as long as the cost is reasonable. In addition, the container policy restates the basic policy's call for the best use of both commercial and the MSC-chartered ships.

The DOD activity responsible for selecting the method of shipment for all ocean cargo is the Military Traffic Management Command. The command has interpreted the container policy as follows:

"\* \* \*commensurate with the availability of resources, cost favorability, and operational consideration, all ocean going military cargo that can be containerized will be containerized; maximum possible use will be made of commercial containers, emphasizing through movement from source to user."

During our review, we spoke with command officials at the Military Ocean Terminal in Bayonne, New Jersey. This activity manages most of the military cargo. Traffic personnel at the command stated that the operating procedure was to determine if the cargo to be shipped would fit into a container. If so, and service was available, the cargo would be shipped commercially. They explained that because the chartered fleet had very limited container capability, they were implementing DOD policy by this practice.

DOD Regulation 4500.32-R, the Military Standard Transportation and Movement Procedures, sets standards for planning, documenting, and moving military cargo. Both military shippers and traffic managers use this procedure. According to the procedure, the first step in the shipment selection process is to determine whether the cargo can be containerized. When the delivery can be made using either container or break-bulk service, the least costly method is to be used. Traffic managers usually compare published commercial container rates to noncontainerized or break-bulk rates. Sometimes, they also consider military ocean shipping and terminal costs. Since commercial container rates are usually lower than break-bulk rates, commercial container carriers are selected.

Another commonly used procedure, set forth in the Military Traffic Management Regulation (Army Reg. 55-355), requires selecting the method of shipment which meets military needs at the lowest cost. To make this cost determination, the regulation recommends using the Worldwide Cargo Transportation Costs Guide, Department of the Army Pamphlet 55-5. This guide compares the weighted averages of commercial container and break-bulk rates. The guide stresses the inherent benefits of containers in that, generally "\* \* \* the rates are more favorable \* \* \* service is better and more frequent, packing and packaging requirements are reduced and loss through damage and pilferage is minimal." The guide, however, does not mention the chartered fleet or the availability of this sealift capacity for which the Government has already paid.

## CHAPTER 4

### CONCLUSION AND RECOMMENDATION

#### CONCLUSION

The Navy charters ships to carry military cargo. These ships usually sail more than half empty. At the same time, the Navy is buying space on regularly scheduled commercial ships. The Navy justifies the chartering of excess capacity on the basis of contingency needs.

We previously reported on this contingency requirement and suggested alternative, less costly ways of meeting it. Since our report, these alternatives have become even more viable.

#### RECOMMENDATION

Considering the availability of other less costly resources to meet contingency requirements, we recommend that the Secretary of Defense reexamine the need for chartering excess ships for contingencies. However, if the excess capacity is needed, the Secretary of Defense should clarify DOD's policy on the use of chartered versus commercial ships to make maximum use of the excess capacity in peacetime.

## CHAPTER 5

### OBJECTIVES, SCOPE, AND METHODOLOGY

We examined the military's use of chartered cargo ships because, during a prior review of MSC's readiness capability, we noted these ships appeared to be underused. We limited our review to the chartered ships and particularly to the cargo ships because they were the backbone of the fleet. The remaining chartered ships were of a special or unusual nature. For example, three ships were bulk carriers used to transport coal to military installations in Europe. As a result, they usually returned empty and the benchmark for good utilization was not clear. One was a special purpose roll-on/roll-off ship and the others were tugs and barges which were used exclusively to support the Air Force and National Aeronautics and Space Administration downrange stations from Port Canaveral, Florida, and the DOD installation at Guantanamo Bay.

Our examination of the use of the military cargo ships included a review of pertinent DOD policies and procedures governing their use. In addition, we interviewed Army and Navy officials in Washington, D.C., and at the Military Ocean Terminal in Bayonne, New Jersey. Further, we made a detailed examination of pertinent records for the voyages made by these ships during April 1978 through March 1979. MSC officials had used this same period to examine the ships' operations, and they advised us the period was representative of the chartered ship operations. We also interviewed Army and Navy officials at the Military Ocean Terminal in Oakland, California, and we visited five major commercial ship operators in the metropolitan New York City area. We also observed the loading and unloading of two chartered ships at the Military Ocean Terminal in Bayonne, New Jersey.

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SUMMARY OF CHARTERED SHIP UTILIZATION

APRIL 1978 - MARCH 1979

<u>Ship</u>	<u>No. of voyages</u>	<u>Capacity in measurement tons</u>	<u>Average outbound utilization</u>		<u>Average inbound utilization</u>	
			<u>Measurement tons</u>	<u>Percent</u>	<u>Measurement tons</u>	<u>Percent</u>
American Challenger	7	17,187	6,563	38	3,171	18
American Champion	4	17,187	6,430	37	7,314	42
American Charger	4	17,187	7,015	40	7,435	43
American Chieftain	6	17,187	5,021	29	3,960	23
American Corsair	4	17,187	6,588	38	6,609	38
American Courier	9	17,187	6,012	34	4,797	27
American Racer	8	17,176	5,620	32	3,848	22
American Ranger	10	a/13,064	7,082	54	1,658	12
American Reliance	2	17,176	8,993	52	3,476	20
Pioneer Commander	7	17,253	6,433	37	2,236	12
Pioneer Contender	4	17,253	7,899	45	4,759	27
Pioneer Contractor	5	17,253	6,898	40	4,481	25
Pioneer Crusader	4	17,253	6,333	36	4,928	28
Pioneer Moon	5	17,187	8,598	50	6,427	37
Transcolorado	5	16,250	4,943	30	3,848	23
Transcolombia	3	16,250	6,272	38	6,121	37
Green Forest (note b)	4	19,735	5,428	27	2,888	14
Green Port	1	19,735	5,616	28	3,756	19
Green Springs (note b)	2	19,735	7,684	38	7,763	39
Green Wave	3	19,735	6,930	35	3,839	19

a/This ship was reconfigured to a partial containership which reduced its capacity from 17,176 to 13,064 measurement tons.

b/These ships were returned to their owners before September 1979 and were therefore not a part of the 18 ships mentioned on p. 1.

APPENDIX I

APPENDIX I



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